Title: Chromatographic Methods for Adenovirus Purification

Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 1 of 12 (Figure 1)

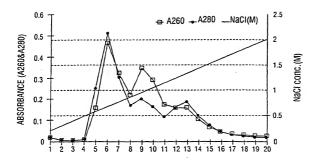


FIGURE 1

## Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363

Sheet 2 of 12 (Figure 2)

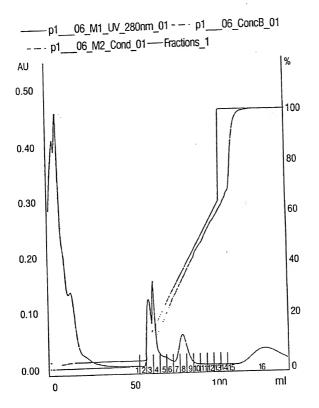


FIGURE 2

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 3 of 12 (Figure 3A)

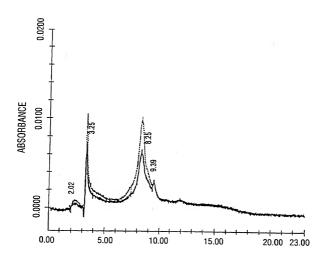


FIGURE 3A

Title: Chromatographic Methods for Adenovirus Purification

Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 4 of 12 (Figure 3B)

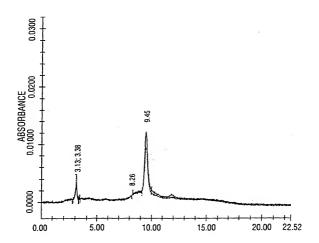


FIGURE 3B

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37104A Nabeela R. McMillian - 43,363 Sheet 5 of 12 (Figure 3C)

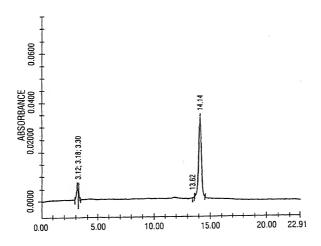


FIGURE 3C

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 6 of 12 (Figure 4)

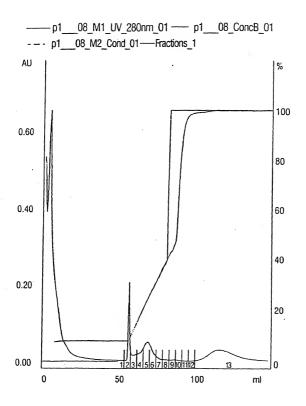


FIGURE 4

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabcela R. McMillian - 43,363 Sheet 7 of 12 (Figure 5A)

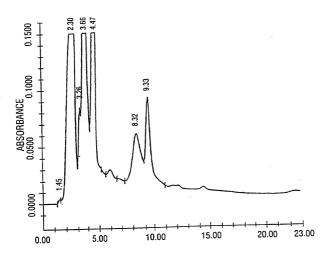


FIGURE 5A

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 8 of 12 (Figure 5B)

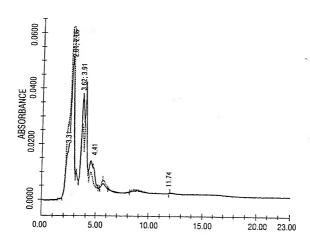


FIGURE 5B

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43.363

Nabeela R. McMillian - 43,363 Sheet 9 of 12 (Figure 5C)

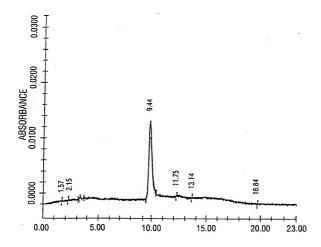


FIGURE 5C

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac

Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 10 of 12 (Figure 5D)

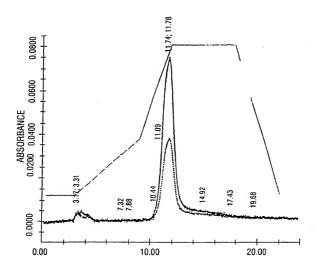


FIGURE 5D

Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabcela R. McMillian - 43,363 Sheet 11 of 12 (Figure 5E)

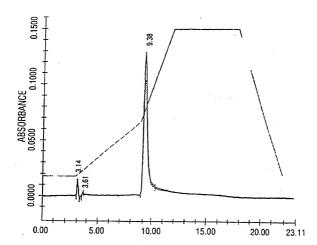


FIGURE 5E

## Title: Chromatographic Methods for Adenovirus Purification Inventor: Joseph Senesac Docket No.: 29853/37704A Nabeela R. McMillian - 43,363 Sheet 12 of 12 (Figure 6)

	TILTER V (PFU/ML)	OL. (ml)	YEILD (PFU)	RECOVERY (%)
CUBE (LOW PERFUSION RATE  KEEP GLUCOSE>1g/L)  1% TWEEN-20 BUFFER  HARVEST  CLABIFICATION AND				STEP ACC.
CLARIFICATION AND FILTRATION (0.22 UM)  VIRUS SOLUTION  CONC./DIAF.  (10-FOLD CONC., DIAF	2.6x10 <sup>9</sup>	1900	4.9x10 <sup>12</sup>	!
INTO 1M NaCI BUFFER CONC. SUP BENZONASE TREATMENT (O/N, RT, 100u/ml) TREATED SUP	A 2.5x10 <sup>10</sup>	200	<sub>5x10</sub> 12	102%
DILUTED WITH WATER TO CONDUCTIVITY = 22-25 mS/cm	7x10 <sup>9</sup>	700	4.9x10 <sup>12</sup>	98% 100%
DILUTED VIRUS SOLUTION	1.5x10 <sup>10</sup>	240	3 6v1n12	73% 73%
PURIFIED VIRUS	1.0010	270	J.0X10 -	10/0 10/0
CONC./DIAF (5-FOLD CONC) FINAL PURIFIED PRODUCT	7x10 <sup>10</sup>	50	3.5x10 <sup>12</sup>	97% 71%